



## Department of Energy

Washington, DC 20585

April 21, 2010

### MEMORANDUM FOR DISTRIBUTION

FROM:

DAE Y. CHUNG  
PRINCIPAL DEPUTY ASSISTANT SECRETARY  
FOR ENVIRONMENTAL MANAGEMENT

SUBJECT:

Office of Environmental Management's Operations Programs  
Protocol

The purpose of the attached protocol is to establish the Environmental Management (EM) Operations Programs framework for managing and reporting progress. Capital asset projects will continue to be managed in accordance with the requirements of the Department of Energy (DOE) Order 413.3A, *Program and Project Management for the Acquisition of Capital Assets*. The Deputy Assistant Secretary for Project Management, EM-10, is responsible for capital asset projects, and the Deputy Assistant Secretary for Program and Site Support, EM-50, is responsible for the operations programs. These offices will be working together with the sites to identify the individual capital asset projects and operating activities (formerly operating projects) and project management requirements within each project baseline summary, based on the application of the EM Recovery Act Portfolio Framework (<https://ido.e.doe.gov/portal>).

The details of this protocol will be discussed in the upcoming Federal Project Director's Workshop scheduled for June 2010, and on an individual site by site basis to discuss site specific issues and concerns and to develop a path forward for implementation.

If you have any further questions, please call me at (202) 586-7709 or Mark Gilbertson, Deputy Assistant Secretary, Office of Program and Site Support, at (202) 586-5042.

Attachment



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Robert Fleming, Acting Director, Office of Environmental Projects and Operations, NA-56

## Protocol for Operations Programs

The purpose of this protocol is to establish the Environmental Management (EM) Operations Programs framework for managing and reporting progress. Capital asset projects will continue to be managed in accordance with the requirements of the Department of Energy (DOE) Order 413.3A, *Program and Project Management for the Acquisition of Capital Assets*. The Deputy Assistant Secretary for Project Management, EM-10, is responsible for capital asset projects, and the Deputy Assistant Secretary for Program and Site Support, EM-50, is responsible for the operations programs. Operations programs will no longer be subject to the DOE Order 413.3A requirements. The project management principles contained in the Order will apply in a tailored manner. Critical Decisions (CD) will no longer be required. EM expects the sites to maintain control of the operating activities, utilize site-level processes and procedures that are currently in place, manage operations work scope effectively and efficiently, and meet contract, funding, and performance requirements. Operational activity costs (pre-CD-2, approve performance baseline) associated with the planning of capital asset projects shall be managed in a manner that allows the Total Project Cost (TPC) and life-cycle costs of the capital asset project to be captured at CD-2. Specific guidance on this process will be provided under separate cover. This protocol provides the sites (with the Office of Program and Site Support, EM-50 concurrences), the flexibility to define activities in a work breakdown structure (WBS) and establish baselines in as much detail as necessary to manage the scope of work successfully; however, the contractor's WBS must tie to the EM Corporate WBS. The Office of Strategic Planning and Analysis, EM-62, is in the process of finalizing the EM Corporate WBS guidance document.

There are two types of operating activities: 1) those activities that are discrete (project-like) with definable start and end dates, discrete scopes of work, and measurable accomplishments; and 2) level-of-effort activities that are required to maintain the site and continue indefinitely or until site closure. The operating activities that are discrete in nature shall apply more of the project management principles than those that are level of effort; however, through the tailoring plan, the sites and EM-50 can reach an agreement on which project management principles will apply and the level of detail needed to manage and control the operating activities. When developing new work scope or contracts, overhead and indirect costs shall not be considered as a separate operating activity, but shall be included in the costs associated with either a capital asset project or an operating activity to ensure all costs that apply to a project or activity are captured in the TPC or current baseline as required in the project management principles. An operating activity, if required, is a subdivision of the Operations Programs.

Operating activities shall be grouped according to the twelve program mission categories identified in the EM Corporate WBS, and shall be consistent with the EM Recovery Act Portfolio Framework. In addition, operating activities shall have defined performance metrics and milestones by mission categories, including, regulatory milestones and contractually established performance based incentives (PBI), if applicable. For major operations programs, such as Nuclear Materials and Tank Farm Operations, lower-level operating activities need to be defined for managing and reporting. Operating activities will be managed using two timeframes: life-cycle and current baseline. The current baseline (formerly "near-term baseline") will be

defined by the site and could be equal to the contract period of performance, or through completion.

### **Metrics and Program Reporting Requirements**

Performance metrics will be defined in both timeframes (life-cycle and current baseline) with a flowdown from the corporate life-cycle metrics to detailed current baseline metrics with an emphasis on the current execution year, and will be the basis for the quarterly reporting. The metrics shall be consistent with the currently established Recovery Act metrics (excludes Recovery Act specific metrics, like jobs created, etc.). The metrics shall also be integrated at the site level and rollup to EM corporate metrics. The corporate metrics will, at a minimum, include subordinate metrics. Examples of subordinate metrics include:

- Tank Waste (Liquid Waste Eliminated; Liquid Waste Tanks Emptied; Liquid Waste Tanks Closed);
- High-Level Waste (High-Level Waste Packaged for Final Disposition);
- Spent Nuclear Fuel (Spent Nuclear Fuel Packaged for Final Disposition);
- Transuranic Waste (TRU) (Contact-Handled (CH)/Remote-Handled (RH) Waste Processed; CH/RH Waste Certified; CH/RH Waste Reduction; CH/RH Waste Transported);
- Surplus Nuclear Material (Mill Tailings Disposed; U-233 percent Design Complete, Number of U-233 Containers Disposed, Depleted Uranium Hexafluoride Conversion Facilities (DUF6) Cylinders Processed; Greater than Class C (GTCC) Disposed; Plutonium Disposed; Number of Plutonium Surveillances Conducted);
- Low-Level Waste/Mixed Low-Level Waste (LLW/MLLW) (Volume of LLW/MLLW Disposed);
- Facility Decontamination and Decommissioning (D&D) and Soil and Groundwater Remediation (RI/FS Completions, Buried Waste Exhumed, Groundwater Wells Installed, Numbers of Groundwater Plumes Contained, Facility Square Footage Demolished for Nuclear, Radioactive, and Industrial Facilities, and Footprint Reduction).

Monthly performance data for operating activities will be submitted into the Integrated Planning, Accountability, and Budgeting System (IPABS) but will not be submitted to the Office of Engineering and Construction Management (OECM). Data will include cost and schedule information, milestones, and performance metrics accomplishments. Quarterly reviews will be conducted by the Operations Program Control Board (OPCB). An OPCB Standard Operating Policy and Procedure (SOPP) is currently under development by EM-50. A key aspect will be the identification of the requirements necessary to maintain the integrity of the life-cycle cost estimate. Life-cycle, current baseline, performance, contract information, and funding (three year budget cycle) will be discussed during these meetings. EM-50 will set the schedule and agenda for these meetings and must coincide with the Office of Project Management, EM-10 quarterly project reviews. In addition, monthly reporting of financial, schedule, and performance information will be submitted in a format similar to the current Recovery Act reporting.

## Life-Cycle Planning

The Assistant Secretary for Program Planning and Budget, EM-60, is responsible for maintaining the life-cycle data within IPABS in support of the EM Environmental Liability costs. The life-cycle will include work performed to date (prior year costs); current baseline, and the remaining scope, if any, to completion of the activity. This scope shall be defined in a WBS that is compatible to the EM Corporate WBS, analytical building blocks (ABB) structure, and PBS. The EM Corporate WBS supports the EM Enterprise Project Control System (EMEPCS) (being developed by the Office of Strategic Planning and Analysis, EM-62) and contains four WBS levels: EM, site name, operating activities, and the associated ABBs. The contractors will continue to have the responsibility for developing a detailed WBS for managing each operating activity. The level of the WBS will be determined by the type of activity and details required to manage the activities below level four.

Scope descriptions shall be at a summary level and identified in planning packages; however, additional details are allowable if already developed similar to what is being used in the Recovery Act Program. Prior to moving the scope into a new current baseline, EM and the site will determine which scope will be classified as capital asset projects and which scopes will remain as operating activities. Life-cycle costs beyond the current baseline must be estimated as a range based around a point estimate. Additional guidance is provided in the *"EM Protocol for Application of Contingency and Management Reserve for the Acquisition of Capital Asset Projects"* (being developed by the Office of Acquisition and Contract Management, EM-80). All major assumptions (e.g. regulatory, completion dates, funding profiles, start operation dates, repository shipping dates, etc.) will be documented and utilized in developing the cost and schedule ranges.

The life-cycle will include all costs in order to maintain consistency in determining EM Environmental Liability costs. The life-cycle will be under change control and changes within the EM program to add/delete scope, increase/decrease cost or schedule ranges, and performance metrics will require approval by the OPCB, co-chaired by the Chief Technical Officer (EM-3) and the Chief Business Officer (EM-4), with members from the Office of Project Management (EM-10), the Office of Technical and Regulatory Support (EM-40), the Office of Program and Site Support (EM-50), the Office of Program Planning and Budget (EM-60), and the Office of Acquisition and Contract Management (EM-80), and managed by the Office of Program and Site Support (EM-50). All other life-cycle changes will be at the site manager level with documentation being provided to the Office of Program and Site Support (EM-50) within three weeks after approval for information only. Change control thresholds will be established in the Project Management Plan (PMP) and developed as part of tailoring strategy. New scope being transferred from other DOE organizations to EM must be added to the life-cycle cost through the facility transfer process (SOPP 34, Excess Facility Transfer to the Office of Environmental Management) or by approval of the Assistant Secretary for Environmental Management (EM-1). All changes will be reflected in IPABS and documented in the Project Execution Plan (PEP) or PMP.

All remaining life-cycle scope (i.e. scope beyond the current baseline) is classified as an operating activity until that scope is defined and ready to move into the current baseline. Once a

contract is awarded or modified to add the new scope, and better scope definition is available, EM-10 and EM-50, with the site, will determine what portion of the scope of work will be classified as a capital asset project or operating activity. The capital asset projects will be subject to DOE Order 413.3A requirements and the operating activities will be subject to this protocol.

### **Current Baseline**

The current baseline (formerly "near-term baseline") must be tied directly to a contract (contract period of performance) or an appropriate timeframe, depending on completion dates, what information has already been developed, how detailed the schedules are, etc. The site will have the option of defining the length of the current baseline and define what it represents (scope, cost, and schedule) with agreement from EM-50. Contingency and unfunded contingency will no longer be considered in building the current baselines; however, contractors will be allowed to establish a management reserve. Operating activity costs shall be substantiated by actual operations experience. If a program risk is realized and contingency is required, a baseline change proposal shall be processed to move scope to future years, or delete scope, if appropriate, from the baseline to remain within the funding target for the execution year or request additional funding from EM-1. Closure projects must also need to request an extension in the completion date. The EM Operations Programs will utilize scope contingency to manage the baseline. Additional guidance is provided in the "*EM Protocol for Application of Contingency and Management Reserve for the Acquisition of Capital Asset Projects*". The current baseline shall be managed by a certified Federal Project Director or equivalent with EM-50 approval.

A PMP shall be developed to document the information agreed upon in the tailoring plan to manage the current baseline including: scope, cost, schedule, change control thresholds, approval authorities, tailoring strategies, assumptions, regulatory requirements, milestones and metrics, funding profile with emphasis on the three year budget cycle, roles and responsibilities including support from an integrated support team (same as Integrated Project Team), mission need, acquisition strategies, etc. If an approved PEP already exists covering the PMP requirements, a new PMP is not required, assuming EM-50 concurrence; however, the site has the responsibility to review the PEP to ensure that changes are not required due to the EM project restructuring activities, the Recovery Act, or any other changes that have occurred subsequent to the approval of the PEP. The contractor will have to define how the scope will be executed in a detailed WBS. At a minimum, the scope will be defined at the work package and schedule activity level for the execution year with planning packages for out-years; however, the contractor and site have the option to fully baseline the entire current baseline. For activities that are not funded in the execution year (funding is less than the baseline), a change control proposal can be submitted to the local DOE site board to move scope that has not started to a future year or delete scope that is no longer required; however, funded scope that is in process cannot be moved due to cost overruns or schedule delays. Contractors working in coordination with the site are allowed to re-plan or re-sequence schedule activities during the year, at least 30/45 days prior to that activity scheduled start date. Changes will be documented and processed through the local change board.

At the beginning of each current baseline or when a new contractor assumes responsibility for the current baseline a program review must take place to verify that the scope, cost, and schedule are executable, and within the federal baseline. If a new baseline is required, EM-50 will be the

approving authority. The sites will be responsible for conducting the program review on operating activities that cost \$100 million or less, and EM Headquarters (HQ) will conduct the program reviews on all operating activities that cost more than \$100 million. It is expected that both HQ and site qualified reviewers be utilized on all program reviews. The appropriate performance metrics and milestones will be developed for each operating activity and the metric and milestones will be tied to the PBI in the contract, if applicable, or to other contract deliverables. An independent cost review by the EM Consolidated Business Center (CBC) must be requested by the site in support of a new contract award, or a cost review will be performed as part of the program review. The CBC cost review in support of a contract award will be used as the basis for the cost evaluation section of the program review.

Since cost and schedule information will continue to be required for current baselines, some elements of an earned value management system (EVMS) will be used to monitor cost and schedule performance. The relevant elements of the EVMS for the operating activities will be discussed with EM-50 and documented in the tailoring plan. A certification review will only be required if the contractor has capital asset projects that meet the DOE Order 413.3A requirements for a certified EVMS system. Otherwise, a tailored EVMS or Spend Plan must be used with either a self-certification or an EM review conducted based on the five major areas of the ANSI-748 standard; organization, planning and budgeting, accounting, analysis, and revisions (only applicable if no capital asset projects are included in the contract). The final determination will be part of the tailoring agreement with EM-50.

Site schedules will be developed in the Primavera Project Management System based on the EM Corporate WBS, consistent with the ABB structure, fully integrated with logic ties including interdependencies with other contractors on site, other sites, and/or external entities; milestones identified; and resource-loaded with a critical path. Schedule details must be tailored and consistent with the complexity of the scope, details necessary to manage the work, contract requirements, and agreed upon by HQ. Current baseline and detailed schedules shall be provided to EM-62, for distribution to EM-HQ on a monthly basis to support the EMEPCS. Change control thresholds and approval authorities will be discussed in the tailoring strategy. Risk Management Plans (RMP) (see DOE Guide 413.3-7, *Risk Management Guide*) will be required for the current baseline and shall cascade from and be consistent with the life-cycle RMP. A single RMP must be developed with a clear delineation between the risks associated with the current baseline and the risks associated with the remaining life cycle.